Final Report

City of Durham
Economic Impact of the Proposed American Center of the Performing Arts

HUNTER INTERESTS
Urban Economics • Finance • Real Estate Development

American Center of the Performing Arts
Economic Impact Summary

- **$6.1 million in local direct spending** is projected to generate from visiting performers and crew, out-of-town theater patrons, and locals induced to spend locally.
- **15 full-time-equivalent jobs** will be supported by the new performing arts center generating **$612,000 in new wages and salaries**.
- An estimated **$602,000 in direct purchases** will be made annually as a result of ongoing theater operations.
- An additional **$3.7 million in indirect spending** is projected to occur as a result of theater operations.
- Total additional annual earnings generated by new operations will reach approximately $1.3 million with total **indirect earnings equaling $673,200**.
- **83 construction jobs** can be sustained during the course of project development, generating approximately **$3.3 million in wages**.
- The performing arts center is projected to contribute an **additional 15,000 room-nights** to the Durham lodging market.
- An **annual recurring economic impact of $11.7 million** from the American Center of the Performing Arts is projected in year four at stabilization.

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Economic Impact of the Proposed American Center of the Performing Arts

A. Introduction

Hunter Interests Inc. was retained in May 2005 to perform an economic impact study of a proposed performing arts theater for the City of Durham. The study was conducted in the context of future economic impacts of the American Center of the Performing Arts, and is based on operational projections as contained in a October 2004 proposal from the Nederlander Organization and Professional Facilities Management Inc (PFM).

In the course of our study, we thoroughly reviewed documents directly and indirectly pertaining to the proposed facility, including: Performing Arts Facilities Feasibility Study Report to the City of Durham, Webb Management Services, Inc., October, 2002; Study of Visitor-Related Local Tax Options: A Menu for Durham, NC, American Economics Group, September, 2003; a proposal from The American Center for the Performing Arts Associates, and; the aforementioned proposal from Nederlander/PFM. Relevant information was also gathered from various other sources, including the Durham Convention and Visitors Bureau.

The economic impact analysis includes a scan of local economic conditions, and projects the direct economic impacts of theater operations including direct purchases, visitors spending, and direct wages and salaries. The analysis also forecasts the number of permanent full-time-equivalent jobs created and average wages and salaries. We have also made estimates of indirect sales, employment, and other economic impacts to fully dimension the long-term beneficial effects of the proposed project.

B. Demographic Scan

Population — Population growth indicates that an area is attracting new residents, workers and shoppers, generating demand for goods and services. The population growth in the Durham area has been well documented. Indeed, the Raleigh-Durham area has outpaced every other North Carolina MSA in population growth, in a state that experienced a 21.4 percent increase in population from 1990 to 2000, compared to 13.1 percent for the nation. According to the Raleigh-Durham Regional Data Book, there was an increase of 430,000 people from 1970 to 1995, with an additional increase of 902,951 people projected from 1995 to 2020. This growth has had, and will continue to have, direct implications for the success of downtown revitalization initiatives in Durham. Table 1 shows recent population data for the proposed theater's trade area.

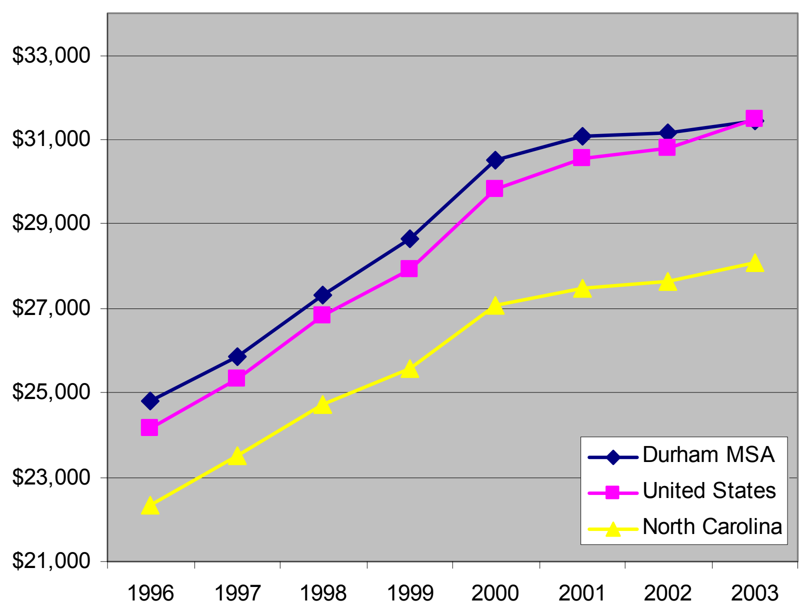
Table 1
Population

Population	1990	2000	% Chg.	2003 est.	% Chg.
Durham City	148,440	187,035	26.0%	198,376	6.1%
Durham County	181,852	223,314	22.8%	236,781	6.0%
Wake County	426,236	627,846	47.3%	695,681	10.8%
Raleigh-Durham-Chapel Hill MSA	858,485	1,196,838	39.4%	1,352,395	13.0%
North Carolina	6,630,406	8,049,313	21.4%	8,407,248	4.4%

Source: U.S. Census; Hunter Interests

Income — Per capita income in the Durham MSA has historically exceeded the per capita incomes for both the State of North Carolina and the nation. See Figure 1.

Figure 1
Per Capita Income (In Current Dollars)



The Raleigh-Durham area has a higher median family income than all other metro areas in North Carolina. The region's median family income surpasses the next highest region, Charlotte, by $7,200 or 11.1 percent. See Table 2.

Table 2 Median Family Incomes for North Carolina MSA's					
Metropolitan Statistical Area	**1999**	**2000**	**2001**	**2002**	**2003**
Raleigh-Durham-Chapel Hill	$59,500	$62,800	$66,100	$71,300	$69,800
Asheville	43,900	45,200	46,800	49,000	49,600
Charlotte-Gastonia-Rock Hill	54,500	57,100	60,400	64,100	61,800
Fayetteville	39,200	40,700	41,900	43,700	46,900
Greensboro-Winston Salem-High Point	49,300	51,000	53,100	56,100	55,500
Hickory-Morgantown	44,500	46,400	48,700	51,500	49,800
Jacksonville	34,700	37,200	38,500	40,100	41,300
Wilmington	44,700	45,600	46,700	50,100	53,700

Buying Power — The Sales & Marketing Magazine's 2004 Survey of Buying Power estimated a potential consumer population of persons over 18 years of age at approximately 669,600 in the Durham metro area, and 1.1 million in the Raleigh-Durham-Cary combined statistical area. This local population represents a potential market whose consuming habits can be affected by a revitalized urban center in Durham. According to the 2004 Survey of Buying Power, the Raleigh-Durham-Cary metro area enjoys an effective buying income (EBI) for retail purchases of $29.6 billion. See Table 3.

Table 3 Effective Buying Income, 2004			% of Hslds: by EBI			
CBSA AREA COUNTY City	**Total EBI ($000)**	**Median Hsld. EBI**	**A** **$20,000-$34,999**	**B** **$35,000-$49,999**	**C** **$50,000 & Over**	**Buying Power Index**
DURHAM, NC METRO	**8,928,631**	**38,386**	**23.5**	**18.7**	**35.6**	**0.1578**
CHATHAM	1,147,500	39,513	23.2	19.8	36.4	0.0172
DURHAM	4,613,575	38,640	23.7	19	35.7	0.0873
• Durham city	3,713,478	36,579	24.6	18.9	33.2	0.0734
ORANGE	2,583,998	39,003	22.1	16.8	38	0.0427
Chapel Hill town	1,009,320	35,781	19.2	14.2	36.7	0.0175
PERSON	583,558	33,624	26.2	21.7	26.4	0.0106
RALEIGH-CARY, NC METRO	**19,200,512**	**45,738**	**20.8**	**19.2**	**44.5**	**0.3452**
FRANKLIN	805,888	35,441	25.1	21.7	28.9	0.0131
JOHNSTON	2,286,253	37,222	23.8	20.8	32.1	0.0408
WAKE	16,108,371	48,490	19.9	18.8	48.1	0.2913
• Cary town	2,775,940	63,501	12.9	15.3	65.5	0.0481
• Raleigh city	6,545,785	41,381	24.1	20	38.8	0.1301
RALEIGH-DURHAM-CARY, NC COMBINED STATISTICAL AREA	***29,556,593***	***42,351***	***22.1***	***19.2***	***40.3***	***0.5281***

Source: Sales and Marketing Management; Hunter Interests Inc.

C. Operational Characteristics of Facility

In order to fully assess the economic impacts of the proposed performing arts center, certain assumptions must be made of its operating characteristics. Table 4 shows pro forma operating projections for the facility as presented by Nederlander/PFM in their 2004 proposal. In year four at stabilization, the facility is projected to play host to approximately 261,493 paying visitors, and have a total annual income of approximately $2.3 million.

Table 4
Summary of Facility Operational Characteristics

	Events	Projected Gross	Net Income to PAC	# Tickets	Net Concessions	Annual Income
Year 1	128	$8,485,925	$933,929	215,620	$203,735	$1,827,564
Year 2	141	$9,334,518	$1,027,322	237,182	$224,109	$2,030,601
Year 3	148	$9,801,243	$1,078,688	249,041	$235,314	$2,162,166
Year 4	155	$10,291,306	$1,132,622	261,493	$247,080	$2,315,554
Year 5	163	$10,805,871	$1,189,254	274,568	$259,434	$2,428,975

Source: Nederlander/PFM; Hunter Interests Inc.

D. Economic Impacts

Direct Spending in the Local Economy — Direct local spending is a function of the amount of dollars captured by local businesses that was induced by the presence of the new performing arts center. The estimates of direct spending contained herein are based on the experience of comparable facilities in markets similar to Durham.

Visiting performers and crew will require lodging, meals, local transportation, etc., and will typically buy sundries, souvenirs, small apparel items, etc. Based on an average of 68 performers and crew for each of 155 events, we project direct spending of approximately $1.5 million in this category in year four.

Ancillary visitor spending resulting from attendance at individual attractions is dependent in large measure on the characteristics of a specific attraction. For instance, performing arts theaters offer most of their events during the evening hours, which would typically induce some additional spending on dining. Depending on the length of the visitors' stay, additional dollars may be spent on retail items, fuel, etc. In some cases, visitors may rely on local transit to bring them to and from the theater.

Based on surveys of similar facilities, we estimate that 21 percent of the center's patrons will travel from a distance of over one hour's ride to attend performances, which constitute out-of-town patrons. Out-of-town patrons are more likely to extend their stay in Durham, and include a nice dinner, retail spending, and possibly a hotel stay in their plans. We estimate direct spending in this category of approximately $2.5 million in the fourth year.

Local patrons are projected to make up 79 percent of theater goers. Although they may dine at a local restaurant as part of their theater experience, they are unlikely to require lodging. Nonetheless, local patrons are projected to spend approximately $1.9 million outside of the theater in its fourth year of operation.

Theater productions will be require to spend some of their budget locally, particularly on media advertising and the printing of additional programs for their shows. It is estimated that spending in this category will equal approximately $197,400 in year four. Total direct spending in year four at stabilization is projected to equal approximately $6.1 million. See Table 5.

Table 5
Direct Spending in the Local Economy

Projected Attendance	261,493
Projected Ticket Revenues	$10,291,306
Facility Revenues - All Sources	$2,315,554
Visiting Performers: (68 x 155 Days)	
Local Transport ($5)	$52,700
Meals ($48)	$505,920
Lodging ($75)	$790,500
Retail ($19)	$200,260
Subtotal	$1,549,380
Out-of-Town Patrons (21%)	54,914
Local Transport ($.61)	$33,497
Meals ($34)	$1,867,060
Lodging (4,500*$75)	$337,500
Retail ($5)	$274,568
Subtotal	$2,512,625
Local Patrons (79%)	206,579
Local Transport ($.61)	$126,013
Meals ($7)	$1,446,056
Retail ($1.50)	$309,869
Subtotal	$1,881,939
Production Direct Local Expenses	
Media Advertising	$120,000
Printing	$72,000
Dry Cleaning	$5,400
Subtotal	$197,400
Total Local Direct Spending	**$6,141,344**

Source: Nederlander/PFM; Hunter Interests Inc.

In some economic analyses, substitution factors are applied to account for spending that has simply shifted from one competing enterprise to another. In the case of a performing arts center, this premise assumes that consumers will forgo one evening's entertainment for another, within a given time period and defined geographical area. In this highly mobile society however, entertainment options can be readily accessed beyond the city limits, as evidenced by the proliferation of suburban shopping malls and other destinations. Entertainment attractions in Chapel Hill and Raleigh are also competing for the dollars from Durham residents. An attraction's ability to retain dollars within the local economy that would have otherwise been spent elsewhere must also be considered, along with its capacity to be a magnet for outsider's dollars. Popular destination attractions can possess enough drawing power to easily transcend traditional economic rules-of-thumb.

In a dynamic and growing economic area such as Durham, the notion that a new entertainment venue will necessarily cannibalize business at other local enterprises does not take into account certain synergies associated with downtowns and entertainment districts that contain a mix of mutually supporting uses. As a critical mass of uses begins to redefine downtown Durham as a destination attraction in its own right, paradigm shifts will begin to occur in the performance of other market sectors.

Follow-up studies on successful destination attractions have concluded that substitution factors rarely exceed 30 percent, due in large measure to the reverse effect of retaining dollars in the local economy. Indeed, cultural projects often serve as an inducement for additional development, particularly in affluent, intellectual communities such as Durham, which is how many theater and arts districts have evolved. While a local spending substitution effect may manifest itself in the early days of the theater's operation, it is our contention that this phenomenon cannot be quantified with any degree of accuracy, and may be largely irrelevant in the facility's fourth year of operation.

Employment — Development of the performing arts center will create permanent jobs in the community and generate significant wages that will, in turn, be re-spent throughout the local economy. Direct jobs and wages created through the development of a new business enterprise are perhaps of the greatest importance in assessing economic benefits of the project. Assumptions regarding staffing and wage levels, along with estimated average salaries, were obtained from Nederlander/PFM projections, and are comprised of full-time and part-time positions. Based on the Nederlander/PFM pro forma, we estimate the creation of 15 new full-time equivalent jobs accounting for a projected total of $612,000 in salaries and wages. See Table 6.

Table 6 American Theater for the Performing Arts Employment, Salaries and Wages						
Estimated FTE Job Range		Mid-	Estimated Average Salary Range		Mid-	Mid-Point Total Direct Wages &
Low	High	Point	Low	High	Point	Salaries
10	20	15	$16,320	$65,280	$40,800	$612,000

Source: Nederlander/PFM; Hunter Interests Inc.

Direct Impact from New Operations — As the theater enters its operational phase, it will purchase necessary goods and services on a regular basis. The operations will require the replenishment of office supplies, and will utilize professional services such as accounting, legal, equipment maintenance, and waste removal. It will also utilize public utilities such as electric, gas, water, and sewer, necessitating a minimum capital investment in facilities.

Based on comparative operating standards, every dollar of retail and service sales generates approximately $.26 in direct purchases from various supplier industries. Based on projected annual gross receipts of $18.8 million, we estimate that direct purchases by new operations would be approximately $4.9 million. Of course, not all of this expenditure will occur in the local or even regional economy. However, the value of this impact over time remains quite significant and of importance to local suppliers and service companies. See Table 7.

Table 7 American Theater for the Performing Arts Estimate of New Project Operations Direct Impact on Sales	
Total Income, Year Four	$2,315,554
Output Multiplier	0.26
Direct Purchases Made by Operations	$602,044

*Based on RIMS II model

Source: US Bureau of Economic Analysis; Hunter Interests Inc.

Recurring Indirect Impacts and Multiplier Effects — The direct economic impacts of potential development are only part of the total economic impact picture. In fact, it is the indirect economic impacts that are vitally important in the overall consideration of the theater development from the public perspective. The impacts on local tourism outside the downtown, other local hotels and motels, and existing restaurants and retail establishments comprise the larger picture of economic activity that should be evaluated in the context of the performing arts center.

The expenditure patterns of people in the Durham area will be impacted by a new performing arts center in the downtown. In addition to direct spending, there will be indirect spending generated as a result of one industry's impact on another. When a business enterprise directly impacted by theater patrons experiences an increase in revenues, it makes purchases from other suppliers and businesses in the area leading to an increase in their sales, resulting in a succession of impacts throughout the local and regional economy. Wages and salaries paid to workers get re-spent throughout the economy with most being spent on typical living expenditures such as housing, food, transportation, clothing, etc., which in turn provide wages for workers in those industries.

Direct spending associated with the American Center of the Performing Arts can be expected to generate additional indirect spending by a factor of approximately 1.6 times. This assessment is based on the RIMS II (Regional Industrial Multiplier System: U.S. Department of Commerce). RIMS II is a widely used input-output model based upon local economic multipliers for various industries. We calculate that total additional annual spending generated by the performing arts center will reach approximately $9.8 million with total indirect earnings equaling $3.7 million. See Table 8.

Table 8
American Theater for the Performing Arts
Local Spending Impact

Visiting Performers	$1,549,380
Out-of-Town Patrons	$2,512,625
Local Patrons	$1,881,939
Production Direct Local Expenses	$197,400
Total Direct Spending	$6,141,344
Spending Multiplier*	1.6
Total Additional Spending	$9,826,150
Total Indirect Spending	$3,684,806

* Based on RIMS II model.
Source: US Bureau of Economic Analysis; Hunter Interests Inc.

According to the regional input-output modeling system (RIMS II), wages earned by employees in new operations will be re-spent approximately 2.1 times. We calculate that total additional annual earnings generated by new operations will reach approximately $1.3 million with total indirect earnings equaling $673,200. See Table 9.

Table 9 American Theater for the Performing Arts Local Employment and Earnings Impact	
Direct FTE Jobs	15
Indirect/Direct Relationship*	1.2:1
Indirect Jobs	18
Direct Wages and Salaries	$612,000
Earning Mulitplier*	2.1
Total Additional Earnings	$1,285,200
Total Indirect Earnings	$673,200

* Based on RIMS II model.

Source: US Bureau of Economic Analysis; Hunter Interests Inc.

Direct Construction Jobs, Wages and Salaries — Based on total construction costs at build-out of approximately $25 million, and a cost per construction job of $300,000, we estimate that approximately 83 construction jobs would be sustained during the course of project development. Based on an annual job wage of $40,000, we project that all construction jobs would generate approximately $3.3 million in wages during the course of project development. See Table 10.

Table 10 American Theater for the Performing Arts Regional Direct Construction Jobs and Wages	
Total Construction Costs	$25,000,000
Cost per Construction Job	$300,000
Total FTE Construction Jobs	83
Average Annual Job Wage	$40,000
Total Annual Construction Wages	**$3,320,000**

Sources: The National Council for Urban Economic Development; Statistical Abstract of the United States; Hunter Interests Inc.

Summary of Economic Impacts — The annual recurring economic impact from the American Center of the Performing Arts is projected to equal approximately $11.7 million in year four at stabilization. The $25 million project will sustain $3.3 million in annual construction wages for the duration of development. The facility is projected to support 15 direct full-time-equivalent jobs. See Table 11.

Table 11 American Theater for the Performing Arts Economic Impact Summary, Year Four	
Projected Attendance	261,493
Facility Revenues - All Sources	$2,315,554
Recurring Economic Impacts	
Total Local Direct Spending	$6,141,344
Direct Salaries & Wages	$612,000
Direct Purchases Made by Operations	$602,044
Total Indirect Spending	$3,684,806
Total Indirect Earnings	$673,200
Total Recurring Impacts	$11,713,394
Non-recurring Economic Impacts	
Total Annual Construction Wages	$3,320,000
Direct FTE Employment	15

E. Impact of Room Tax

Funding for the proposed American Center of the Performing Arts is scheduled to be provided through the addition of one percent to the room tax on lodging currently in place in Durham. The addition of any new taxes may have implications for the local economy that must be considered in the context of the economic impact analysis. Although the impact of a future tax can only be surmised at this time, an examination of past lodging performance characteristics of the Durham market can be performed to assess the impact of a recent room tax increase.

According to a recent Smith Travel Research (STR) comprising 45 properties in the Durham hotel market, 2004 room revenues equaled approximately $104.5 million. A one percent tax on this amount would yield approximately $1.05 million in annual revenue, which could in turn be applied to debt service on the proposed performing arts center. Based on a 2004 average daily rate of $73.73, the tax would essentially tack on an additional $0.74 for one night's lodging. This tax would affect over 45 lodging properties in Durham. Table 12 shows the Durham lodging properties that are included in the hotel market analysis. Lodging properties in Durham that are not included on the list do not typically participate in providing data to STR. See Table 12.

Table 12
Durham Hotels, Selected Properties

Name of Establishment	Open Date	Rooms	Name of Establishment	Open Date	Rooms
Marriott Durham @ Civic Center	Feb 1989	187	Courtyard Duke University	Apr 1997	146
Budget Inn	Not Avail.	120	Hampton Inn	Jul 1987	136
Marriott @ RTP	May 1988	225	Innkeeper Durham West	Jun 1984	68
Wingate Inn	Oct 1998	85	Washington Duke Inn	Oct 1988	146
Sleep Inn Durham	Jun 2002	73	Red Roof Inn Chapel Hill	Jul 1988	114
Studio Plus Durham	Sep 1998	84	La Quinta Inn & Suites	Mar 1999	130
Springhill Suites RTP	Dec 2000	120	Homewood Suites Durham	Nov 1998	96
Clarion Hotel @ RTP	Oct 2001	81	Homestead Suites Duke University	Apr 1998	127
Comfort Suites Durham	Jul 1998	125	Comfort Inn University	Jul 1989	138
Homewood Suites @ RDU	Jan 1999	122	Extended Stay America @ South Square	Oct 1997	120
Wyndham Garden Hotel	Apr 1989	175	Hilton @ RDU	Sep 1988	249
Sheraton Hotel Imperial Convention Center	Sep 1986	331	Radisson @ RTP	Jun 1972	197
Extended Stay America @ RTP	Sep 1998	138	Innkeeper Durham South	Jun 1982	87
Quality Inn & Suites Durham	Feb 1990	135	Comfort Inn Durham	Jan 1987	95
Brookwood Inn @ Duke	Jun 1985	149	Homestead @ RTP	May 1997	125
Super 8 Durham University	Jun 1965	48	La Quinta Inn & Suites @ RTP	Jun 1999	141
Howard Johnson Express	Jun 1967	80	Red Roof Inn @ RTP	Jul 1986	115
Hilton Durham	Jun 1987	195	Studio Plus Durham	Dec 1996	72
Red Roof Inn @ Duke Medical	Feb 1987	117	Residence Inn @ RTP	Feb 1991	122
Millennium Hotels	Jun 1982	313	Hawthorn Suites @ RTP	Jun 1986	100
Holiday Inn Express Durham	Nov 1999	79	Courtyard @ RTP	Nov 1998	123
Days Inn Durham	Mar 1963	100	Doubletree	Dec 1987	203
University Inn	Not Avail.	46			
Total Properties 45			**Total Rooms 5978**		

Source: Durham Convention and Visitors Bureau; Smith Travel Research; Hunter Interests Inc.

An assessment of the Durham lodging market over the past six years shows a downturn in all performance indicators in 2002, typical of the national trend subsequent to the 9/11 disaster, with a marked improvement through 2004. Indeed, year-to-date statistics for April show revenue per available room (RevPAR, the primary indicator by which hotels measure their own performance) up from $48.55 in 2004 to $51.69 in 2005, an increase of 2.2 percent.

All Durham lodging performance indicators improve from 2003 to 2004: the number of available room nights increased by approximately 28,875; the occupancy rate rose from 63.6 percent to 65 percent; room night demand increased by 3.6 percent; the average daily rate rose by $2.12, from $71.61 to $73.73; RevPAR increased by $2.40, from $45.55 to $47.95. See Table 13.

Table 13 Selected Durham Hotel Characteristics, 1999-2004	1999	2000	2001	2002	2003	2004
Number of Rooms	2,041,758	2,096,615	2,142,337	2,164,772	2,149,995	2,178,870
Occupancy Rate	65.6%	69.4%	63.1%	61.8%	63.6%	65.0%
Rm. Night Demand	1,338,866	1,454,943	1,352,100	1,338,716	1,367,434	1,416,937
Demand Change		8.7%	-7.1%	-1.0%	2.1%	3.6%
Average Daily Rate	$77.46	$79.00	$77.76	$74.72	$71.61	$73.73
Revenues	$103,702,454	$114,937,477	$105,139,672	$100,026,239	$97,922,649	$104,468,565
Revenue per Available Room	$50.79	$54.82	$49.08	$46.21	$45.55	$47.95

Source: Smith Travel Research; Hunter Interests Inc.

Based on the information contained in Table 13 and more recent hotel performance indicators, it can be concluded that the 1 percent room tax increase in 2002 had no apparent adverse lasting effects on the Durham lodging market. Furthermore, there is no compelling evidence to suggest that an additional one percent room tax increase will adversely effect lodging in the future. In fact, conservative projections point to the performing arts center contributing an additional 15,000 room-nights to the Durham lodging market when both visiting artist's troupes and theater patrons are factored.